

given ozone season, but also completeness of data, and daily peak ozone concentrations on days in the ozone season that can be assumed to be less than the level of the standard. An example calculation of estimated exceedances at the West Alton monitor is given below. A daily exceedance

occurs when the maximum hourly ozone concentration during a given day is greater than or equal to 0.125 parts per million (ppm), using conventional rounding techniques. Monitoring data must be collected and quality-assured in accordance with 40 CFR part 58, and

recorded in EPA's Aerometric Information Retrieval System (AIRS).

MDNR and IEPA submitted quality-assured ozone monitoring data to EPA for the 2000 to 2002 ozone monitoring seasons. Table 1 below summarizes these air quality data.

TABLE 1.—1-HOUR OZONE NAAQS EXCEEDANCES IN THE ST. LOUIS, ILLINOIS-MISSOURI AREA FROM 2000 TO 2002

Site name	County or city and state	Estimated exceedances			Average number of estimated exceedances 2000–2002
		2000	2001	2002	
Jerseyville	Jersey, IL	0.0	1.0	1.0	0.7
Alton	Madison, IL	0.0	0.0	0.0	0.0
Maryville	Madison, IL	0.0	0.0	1.0	0.3
Edwardsville	Madison, IL	0.0	0.0	0.0	0.0
Wood River	Madison, IL	0.0	1.0	0.0	0.3
Houston	Randolph, IL	0.0	0.0	0.0	0.0
East St. Louis	St. Clair, IL	0.0	0.0	0.0	0.0
Arnold	Jefferson, MO	0.0	0.0	0.0	0.0
West Alton	St. Charles, MO	1.0	1.0	1.0	1.0
Orchard Farm	St. Charles, MO	0.0	0.0	2.0	0.7
Bonne Terre	St. Genevieve, MO	0.0	0.0	0.0	0.0
South Lindbergh	St. Louis, MO	0.0	0.0	2.0	0.7
Queeney	St. Louis, MO	0.0	0.0	0.0	0.0
Hunter	St. Louis, MO	0.0	0.0	0.0	0.0
Flo Valley	St. Louis, MO	0.0	0.0	0.0	0.0
St. Ann (old)	St. Louis, MO	0.0	n/a	n/a	¹ 0.0
St. Ann (new)	St. Louis, MO	n/a	0.0	0.0	¹ n/a
Broadway	St. Louis City, MO	0.0	0.0	0.0	0.0
Clark	St. Louis City, MO	0.0	0.0	0.0	0.0
Margaretta	St. Louis City, MO	0.0	0.0	0.0	0.0

¹ The owner of the property on which the old St. Ann monitor was located terminated the lease agreement with MDNR. The new site is 0.7 miles east of the old site. In general, ambient monitors should remain at the same location for the duration of the monitoring period required for demonstrating attainment. However, when three complete, consecutive calendar years of data is not available for a monitoring site, adjustments are made consistent with EPA monitoring criteria, in determining the average number of estimated exceedances per year. The average number of estimated exceedances for 2000–2002 for the old St. Ann monitor is the estimated exceedances for 2000, or 0.0. In addition, where a monitor has been in operation less than three years, the average estimated number of exceedances cannot be determined. Since the new St. Ann monitor has been in operation less than three years, the average number of estimated exceedances for 2000–2002 was not determined.

The following is an example of how the number of estimated exceedances at the West Alton Monitor were determined: During the 2000 to 2002 time period, the West Alton monitor was determined to have an annual average number of estimated exceedances of 1.0. This value was determined in accordance with 40 CFR 50.9 and appendix H, as follows:

$$e = v + [(v/n) * (N - n - z)] \text{ where}$$

Variable description	Comments
e = the estimated number of exceedances for the year.	Calculated.
N = the number of required monitoring days in the year.	Missouri's ozone season is April 1 through September 30.
n = the number of valid daily maxima.	Days with valid data based on 40 CFR part 50 and appendix H.

$$e = v + [(v/n) * (N - n - z)] \text{ where}$$

Variable description	Comments
v = the number of daily values above the level of the standard.	Based on monitored values.
Z = the number of days assumed to be less than the standard level.	Based on 40 CFR part 50, Appendix H, for days that were likely below the standard.

WEST ALTON MONITOR

Variable	2000	2001	2002
e	1.0	1.0	1.0
N	214	214	214
n	214	213	213
v	1	1	1
z	0	1	0

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Variable	2000	2001	2002
Average Number of Estimated Exceedances = (1.0 + 1.0 + 1.0)/3 = 1.0			

2. Criteria (2) and (5): The Area Must Have a Fully Approved SIP Under Section 110(k); and the Area Must Have Met All Applicable Requirements Under Section 110 and Part D

Background

In order to analyze whether the Missouri and the Illinois portions of the area each meet these criteria, it is necessary to discuss what requirements are applicable to the St. Louis area, and for the applicable SIP requirements, the extent to which they are fully approved under section 110(k). In a notice accompanying a rulemaking published June 26, 2001, EPA explained how the states had previously submitted, and